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EXAMINER KING, FELICIA C				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/549,738

Applicant(s)

HOWARD ET AL.

Examiner

FELICIA C. KING

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1784

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Interval Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is written in Response to Applicants' Remarks filed 5/28/10. Claim 1 has been amended. Claim 23 is new.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. **Claims 1-4, 6, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al. (US 5,976,607) in view of Xu et al. (US 2002/0004085) and further in view of Bednar et al. (US 5,242,699).**

Regarding Claims 1 and 23: Higgins discloses a method of preparing a potato based food product in the form of a french fries having a 5/16 in square cross section (7.9 mm) [col.7, lines 63-64], the method comprising the steps of processing potatoes into potato articles having a desired size and shape [col. 7, lines 63-65], blanching said potato articles [col. 7, line 66], dipping said blanched potato articles in a solution to prevent non-enzymic oxidation of the potato articles [col. 7, line 67; col. 8, lines 1-2], drying said potato articles [col. 7, line 4], coating said potato articles in an emulsion containing starch, oil, salt and coloring in the form of paprika [col.6, lines 42-60].

Higgins does not disclose introducing coated articles into a hot air environment; and removing articles from the hot air environment. Xu discloses preparing a potato based food product in the form of french fries having a cross section about 5mm- 15mm [page 1, para 0019] by blanching, enzyme treating, and then dipping the potato substance in a solution [pg. 5, para. 0095, 0096]. Xu discloses that a hydrocolloid/starch based coating step can be performed after the enzyme treatment [pg. 6, para 0103]. Xu discloses exposing the potato substance to hot air after the enzyme treatment but before baking in order to reduce moisture content [pg. 6 para 0100]. The

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steps of applying the coating after the enzyme treatment and the step of hot air drying after the enzyme treatment but before baking is considered to be commensurate with a hot air drying step after the application of a coating. Additionally, Bednar discloses a potato product coated in the form of a french fry with hydrocolloid solution (starch solution) and drying it either at room temperature or by the application of heat [col.4, lines 30-44].

At the time of the invention, it would have been obvious to one of ordinary skill in the art having the teachings of Higgins, Xu and Bednar before him or her to modify the method of Higgins to include a drying step as disclosed in Xu because the drying step after coating the potato article will effectuate a desirable moisture loss [Xu pg.6, para. 0100; Bednar col. 4, lines 33-35, col. 43-49], since the potato article in Higgins is contacted with an aqueous starch solution the coating would be watery and potentially make the potato article soggy without further hot air exposure and it would be undesirable to present a soggy potato article to the consumer. Further, exposing the coated potato product to a hot air environment would allow setting and stabilization of the solution onto the potato strip thereby minimizing or preventing separation of the coating from the potato during subsequent processing steps [Bednar, col.4, lines 39-42].

The references are combinable because they all relate to processing blanched potato products, incorporating a coating step with a starch containing solution and dehydrating the french fry. Although, Higgins discloses partially frying the potato product after coating, this is done in order to preserve the food product where it is then frozen for subsequent reheating, given today's consumer preference for low fat food it would have been obvious to substitute the partial frying method in Higgins for the hot air drying in Xu because it would effectuate desirable moisture loss. Further, Bednar has been disclosed for its disclosure that air drying to effectuate moisture loss and to set a starch containing coating solution is well known in the art.

Although Higgins discloses that the potatoes have a dimension of about 7.9 mm, it is substantially close to that of the instant claims, one of ordinary skill would have expected compositions that are in such close proportions to those in prior art to be prima facie obvious and to have same properties. *Titanium Metals Corp.*, 227 USPQ 773 (CAFC 1985),

Although Xu does not disclose that the potatoes have a dimension between 8 and 15 mm one having ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by Xu overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. *In re Malagari* 182 USPQ 549,553.

Regarding Claim 2: Higgins discloses the step of blanching where the articles are blanched in 170°F (76°C) water for about 7 minutes [col. 7, lines 66-67].

Regarding Claim 3: Higgins discloses placing blanched potatoes in a solution containing Sodium Acid Pyrophosphate ("SAPP") [col. 8, lines 1-2] which prevents non-enzymic oxidation of the potato articles.

Regarding Claim 4: Higgins discloses .5%-2% Sodium Acid Pyrophosphate [col. 7, lines 11-12].

Regarding Claim 6: Higgins discloses drying blanched and dipped potatoes that are oven dried at 180 -190°F [col. 8, lines 3-4].

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al. (US 5,976,607) in view of Xu et al. (US 2002/0004085) and Bednar et al. (US 5,242,699), as applied to claims 1 and 3 above and further in view of Baisier et al. (US 5,279,840).

Regarding Claim 5: Higgins discloses Sodium Acid Pyrophosphate solution at a temperature of 130°F (54°C) for 30 seconds [col. 8, lines 1-2]. Higgins does not disclose Sodium Acid Pyrophosphate solution at a temperature 65°C for around 60 sec. Baisier discloses a potato strip that is immersed in Sodium Acid Pyrophosphate solution at a temperature of 130°F-170°F (54°C-76°C) for about 1 minute (60 sec.) [col. 5, lines 42-44].

At the time of the invention, it would have been obvious to one of ordinary skill in the art having the teachings of Higgins, Xu, Bednar and Baisier before him or her to modify the dipping step of Higgins to include the temperature and time of Baisier because it is common practice in the art to dip blanched strips of SAPP solution for as long as five minutes [col. 1, lines 52-53] and to perform the step at a range of 130°F-170°F [col. 5, lines 43-44]. Baisier suggests that the sugar content of potatoes is a determining factor in whether a SAPP step is needed [col. 1, lines 58-61] which may suggest that the time and temperature of exposure to SAPP depends on the type of potato utilized. Thus it would have been obvious to combine Baisier with Higgins to perform the SAPP step as specified in the claims.

Although Baisier does not disclose the exact temperature at which to hold the SAPP solution, one having ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by Baisier overlap the instantly claimed proportions and therefore are considered to establish a *prima facie* case of obviousness. *In re Malagari* 182 USPQ 549,553.

4. Claims 7, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al. (US 5,976,607), Xu et al. (US 2002/0004085), and Bednar et al. (US 5,242,699), as applied to claim 1 and in further view of Collinge et al. (US 6,132,785).

Regarding Claim 7: Higgins discloses drying blanched and dipped potatoes that are oven dried at 180 -190°F [col. 8, lines 3-4]. Higgins does not explicitly disclose that after dipping the blanched potatoes the drying step is performed at ambient temperature. However, Collinge discloses where after dipping the blanched potato articles, they are dried at ambient temperature [col. 4, lines 10-17].

At the time of the invention, it would have been obvious to one of ordinary skill in the art having the teachings of Higgins, Xu, Bednar, and Collinge before him or her to modify the post dipping drying steps of Higgins for the drying step at ambient temperature because although the time at this step would probably increase in order to attain the desired moisture content of the potato using the lower ambient temperature would advantageously allow for greater control over the drying step thereby mitigating the possibility of over drying of the potato in this initial drying step.

Regarding Claims 16 and 17: Higgins discloses a method of treating a potato product. Higgins does not disclose introducing coated articles to an impingement oven temperature range or the hot air environment at a temperature of between 240 °C to 285 °C. However, Collinge discloses an impingement oven where the hot air environment is 350°F -450°F (177°C -232°C) [col. 5, lines 50-56].

At the time of the invention, it would have been obvious to one of ordinary skill in the art having the teachings of Higgins, Xu, Bednar, and Collinge before him or her to modify Higgins and Xu to state a desired temperature range as in Collinge because potato articles exposed to heat around these temperatures have a comparable finish to potato articles that are fried [Collinge col. 5, lines 55-58].

Further, it would have been obvious to one having ordinary skill in the art at the time of the invention to adjust the temperature for the intended application since the size or thickness of the

potato product has a considerable impact on the exposure to heat on the potato product varies based upon the size or thickness of the potato product and time for exposure, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

In re Boesch, 617 F.2d 272.

5. **Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al. (US 5,976,607) Xu et al. (US 2002/0004085), and Bednar et al. (US 5,242,699) as applied to claim 1 above and in further in view of Anderson et al. (US 5,139,800) as evidenced by Francis, Encyclopedia of Food Science and Technology Second Edition Vol. 1 2000. pg 611.**

Regarding Claim 8: Higgins discloses a coating containing water [col. 6, lines 61-64], oil [col. 6, lines 52-54], starch [col. 5, lines 42- 58], tint (coloring) [col. 6, line 57-58] stabilizer [col. 6, lines 4-12], salt [col. 6, line 59]. Higgins does not explicitly disclose an emulsifier. However, Anderson discloses emulsifiers [col.3, lines 47-52].

At the time of the invention, it would have been obvious to one of ordinary skill in the art having the teachings of Higgins, Xu, Bednar, and Anderson before him or her to modify the coating compositions of Higgins to include the emulsifier of Anderson because emulsifiers are useful in food coated products [Anderson col. 5, lines 42-43], and it would contribute to a more uniform dispersion of coating along the potato product [Francis, pg 611]. Further, it would have been obvious to include an emulsifier in a coating system that contains water and a larger quantity of oil in order to emulsify the mixture and has little to do with the method of cooking the food product (e.g. frying versus baking) and more to do with creating a homogenous dispersion of the ingredients/seasonings used to create the coating.

Further examiner cites, *In re Levin 84 USPQ 232*, which takes the position that "new recipes or formulas for cooking food which involve the addition or elimination of common ingredients, or for treating them in ways which differ from the former practice, do not amount to invention merely because it is not disclosed that, in the constantly developing art of preparing no one else ever did the particular thing upon which the applicant asserts his right to patent. In all such cases, there is nothing patentable unless the applicant by a proper showing further establishes a coaction or cooperative relationship between the selected ingredients which produces a new, unexpected, and useful function."

Regarding Claim 9: Higgins discloses water at 20%-90% [col. 6, lines 61-64], vegetable oil .1%-1.0% [col. 6, lines 52-55], Starch 10%-80% [col.6, lines 48-50], stabilizer .05%- 4.5% [col. 7, lines 8-9], salt 6.19%. Higgins does not explicitly disclose a percentage of Sunflower oil 24.00% - 28.00%, turmeric 0.01% - 0.10%, liquid paprika 0.01% - 0.10%, emulsifier 0.80% - 1.0%. Anderson discloses Sunflower Oil 10%-99% [col.5, lines 30-37], Turmeric .01%-0.10% [col. 5, lines 3-4], paprika 0.01%-1.0% [col. 5, lines 25-27], emulsifier 0.5%-10% [col.5, lines 46-47].

At the time of the invention, it would have been obvious to one of ordinary skill in the art having the teachings of Higgins, Xu, Bednar, and Anderson before him or her to modify the coating compositions of Higgins to include the sunflower oil, turmeric, liquid paprika, and emulsifier of Anderson because they are ingredients commonly used in coating food products and aiding in coloring of food compositions that are cooked [col. 1, lines 33-35; col. 6, lines 14-19].

Further examiner cites, *In re Levin 84 USPQ 232*, which takes the position that "new recipes or formulas for cooking food which involve the addition or elimination of common ingredients, or for treating them in ways which differ from the former practice, do not amount to invention merely because it is not disclosed that, in the constantly developing art of preparing no one else ever did the

particular thing upon which the applicant asserts his right to patent. In all such cases, there is nothing patentable unless the applicant by a proper showing further establishes a coercion or cooperative relationship between the selected ingredients which produces a new, unexpected, and useful function.”

Further, although Higgins and Anderson do not recite the exact percentages as in the instant claim, it would have been obvious to one having ordinary skill in the art at the time of the invention to adjust the percentages of ingredients for the intended application, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al. (US 5,976,607) in view of Xu et al. (US 2002/0004085), and Bednar et al. (US 5,242,699) as applied to claim 1 above and further in view of Higgins et al. (US 5,753,286).

Regarding Claim 10: Higgins ‘607 discloses water [col. 6, lines 61-63], oil [col.6, lines 52-53], starch col. 6, lines 41-43], flour [col.5, lines 43-44], dextrin [col.6, lines 28-29], gum [col.6, lines 4-5], Sodium bicarbonate [col. 6, lines 20-25], salt [col.6, line 59], coloring [col. 6, line 57], oil [col.6, lines 52-55], Sodium Acid Pyrophosphate [Col. 6, lines 13-15]. Higgins does not disclose dextrose. However, Higgins ‘286 discloses dextrose [col. 11, lines 2-3].

At the time of the invention, it would have been obvious to one of ordinary skill in the art having the teachings of Higgins ‘607, Xu, Bednar, and Higgins ‘286 before him or her to modify Higgins ‘607 to include the dextrose of Higgins ‘286 because dextrose is an effective coloring agent and is commonly used in batter to aid in the browning appearance of food products [col. 10, lines 66-67, col. 11, lines 1-4].

Further examiner cites, *In re Levin* 84 USPQ 232, which takes the position that "new recipes or formulas for cooking food which involve the addition or elimination of common ingredients, or for treating them in ways which differ from the former practice, do not amount to invention merely because it is not disclosed that, in the constantly developing art of preparing no one else ever did the particular thing upon which the applicant asserts his right to patent. In all such cases, there is nothing patentable unless the applicant by a proper showing further establishes a coaction or cooperative relationship between the selected ingredients which produces a new, unexpected, and useful function."

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al. (US 5,976,607), Xu et al. (US 2002/0004085), Bednar et al. (US 5,242,699), and Higgins et al. (US 5,753,286) as applied to claim 10 above and further in view Anderson et al. (US 5,139,800).

Regarding Claim 11: Higgins '607 discloses water at 20%-90% [col. 6, lines 61-64], Cornstarch 25% to 40% [col. 7, lines 20] (where the claim recites Maize starch), Modified Potato Starch 15-60% [col. 7, lines 22-23], Rice Flour 5-20% [col.7, line 6], Potato dextrin 0-15% [col. 6, line 29; col. 7, line 7], Xanthan gum .05%-4.5% [col.7, line 8], Sodium Bicarbonate .8% [col.8, line 20], Puro AG (SAPP 40) 0.5% [col.9, line26], vegetable oil .1%-1.0% [col. 6, lines 52-55]. Higgins does not disclose the percentage of Maize starch, dextrose, sunflower oil, turmeric, paprika oleoresin, and guar gum. Further, Higgins '286 discloses dextrose 1-20% [col.11, lines 2-3]. Further, Anderson discloses Sunflower Oil 10%-99% [col.5, lines 30-37], Turmeric .01%-0.10% [col. 5, lines 3-4], Paprika oleoresin 0.01%-1.0% [col. 5, lines 25-27], guar gum .05%-4% [col.3, lines 60-64].

At the time of the invention, it would have been obvious to one of ordinary skill in the art having the teachings of Higgins '607, Xu, Bednar, and Higgins '286 and Anderson before him or her

to modify the composition in Higgins '607 to include the additions disclosed in Higgins '286, and Anderson because the dextrose in Higgins contributes to the browning capabilities of the coating composition [col. col. 10, lines 66-67, col. 11, lines 1-4], because in Anderson the sunflower oil may be used interchangeably with many other oils and is effective in its disclosed amounts [col. 3, lines 36-43], turmeric and paprika are natural colorants and help achieve the desired color in the food coating [col. 5, lines 1-6] and guar gum which is another stabilizer which can be used in combination with the xanthan gum of Higgins '607 would make the composition more viscous [col. 5, lines 5—56].

Although, the named Higgins '607, Higgins '286, and Anderson and the instant claims differ in that they do not teach the exact same proportions as the recited in the instant claims, one having ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by Higgins '607, Higgins '286 and Anderson overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one having ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that; "The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", *In re Peterson* 65 USPQ 2d 1379.

Further, it would have been obvious to one having ordinary skill in the art at the time of the invention to adjust the percentages for the intended application, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272.

Further, examiner cites In re Levin 84 USPQ 232, which takes the position that "new recipes or formulas for cooking food which involve the addition or elimination of common ingredients, or for treating them in ways which differ from the former practice, do not amount to invention merely because it is not disclosed that, in the constantly developing art of preparing no one else ever did the particular thing upon which the applicant asserts his right to patent. In all such cases, there is nothing patentable unless the applicant by a proper showing further establishes a coaction or cooperative relationship between the selected ingredients which produces a new, unexpected, and useful function."

8. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al. (US 5,976,607), Xu et al. (US 2002/0004085), and Bednar et al. (US 5,242,699) as applied to claim 1 and in further view of Judkins (US 5,885,639).

Regarding Claims 12: Higgins discloses as method for treating potato articles but does not disclose where the coated article is further dried before subjecting to hot air environment. However, Judkins discloses drying a starch coated potato product with an air knife for the removal of excess starch slurry.

At the time of the invention, it would have been obvious to one of ordinary skill in the art having the teachings of Higgins, Xu, Bednar, and Judkins before him or her to modify the post coating process in Higgins to include drying the potato article before further subjecting to hot air, as disclosed in Xu and Bednar, in order to further remove excess starch solution contained on the potato products.

Regarding Claims 13, 14, 15: Higgins discloses as method for treating potato articles. Higgins does not disclose introducing the coated article to a warm air environment; drying at temperatures between 100°C and 130°C; 105°C and 120°C respectively. Judkins discloses air drying

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after dipping as discussed above. Xu discloses drying at 40°C to 200°C. Additionally, Bednar discloses a potato product coated with hydrocolloid (starch solution) and drying it either at room temperature or by the application of heat [col. 4, lines 30-44].

At the time of the invention, it would have been obvious to one of ordinary skill in the art having the teachings of Higgins, Xu, Bednar, and Judkins before him or her to modify Higgins to incorporate the drying temperatures in Xu or Bednar because these temperatures are sufficient for adequate setting of the coating solution and moisture removal.

Although Bednar does not recite the same temperature ranges as in the instant claims, since drying temperature is a variable that can be modified by adjusting the amount of time the product is held at this temperature and by the size or thickness of the product being held at this temperature, with drying temperature decreasing as time increases and drying temperature increasing as time decreases. Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the invention to adjust the air drying temperatures based on time and weight of the composition for the intended application, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272.

Although Xu does not disclose the temperate ranges as recited in the instant claims, one having ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by Xu overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. *In re Malagari* 182 USPQ 549,553.

Response to Arguments

1. Applicant's arguments, see pgs 6-11, filed 5/28/10, with respect to the rejections of claims 1-17 under Higgins et al. (US 5,976,607) and secondary references Badertscher (US 5891,494) and Bednar et al. (US 5,242,699), Baisier et al. (US 5,279,840), Collinge et al. (US 6,132,785), Anderson et al. (US 5,139,800), Higgins et al. (US 5,753,286), Judkins (US 5,885,639) have been fully considered and are persuasive in light of amendments made to independent claim 1 and new claim 23.

Therefore, the rejection has been withdrawn.

2. However, upon further consideration, new grounds of rejection is made in view of Higgins et al. (US 5,976,607) and secondary references Xu et al. (US 2002/0004085), and Bednar et al. (US 5,242,699), Baisier et al. (US 5,279,840), Collinge et al. (US 6,132,785), Anderson et al. (US 5,139,800), Higgins et al. (US 5,753,286), Judkins (US 5,885,639).

Conclusion

3. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FELICIA C. KING whose telephone number is (571)270-3733. The examiner can normally be reached on Mon- Thu 7:30 a.m.- 5:00 p.m.; Fri 7:30 a.m. - 4:00 p.m. alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. K./
Examiner, Art Unit 1784

/Timothy M. Speer/
Primary Examiner, Art Unit 1784